

AMENDMENTS TO THE ABSTRACT:

B Please amend the Abstract as follows:

INTERFACE DEVICE

ABSTRACT OF THE DISCLOSURE

The present invention relates to an interface device and, in particular an An interface device for providing ing communication security services. The problem of providing communication security services to, for example, a pair of host computers that must communicate over an insecure public network is a widely addressed one. It is known to provide cryptographic functionality to a host computer such that data traffic transmitted by the host computer can be secured. However a major weakness of known methods is that such cryptographic processing is either carried out on the host or such that, following passing the data to be secured to an additional cryptographic accelerator device plugged into the host, the cryptographically processed data is passed back to the host before subsequent transmission. Both such methods give rise to a situation where, in the event of the host operating system being subverted, the original data and the cryptographically processed data are able to be simultaneously gathered on the host, giving rise to the classic "known plaintext" attack on the cryptographic key used in the encryption operation. According to the present invention however, an interface device is provided comprising a A first interface is provided for receiving data from a first zone in

a first zone data format; ~~means for processing said received~~ Received data is processed through performance of a cryptographic operation on at least a portion thereof; ~~a~~ a second interface is provided for sending ~~said~~ the processed data to a second zone in a second zone data format; ~~and means arranged to pass said.~~ The processed data is then passed exclusively from ~~said~~ such processing ~~means~~ to said the second interface. In this way, in enforcing a unidirectional flow of information through the device and isolating all the necessary functionality (including, for example, the cryptographic key) on the device, the problems of the prior art are advantageously avoided.

Figure (3)